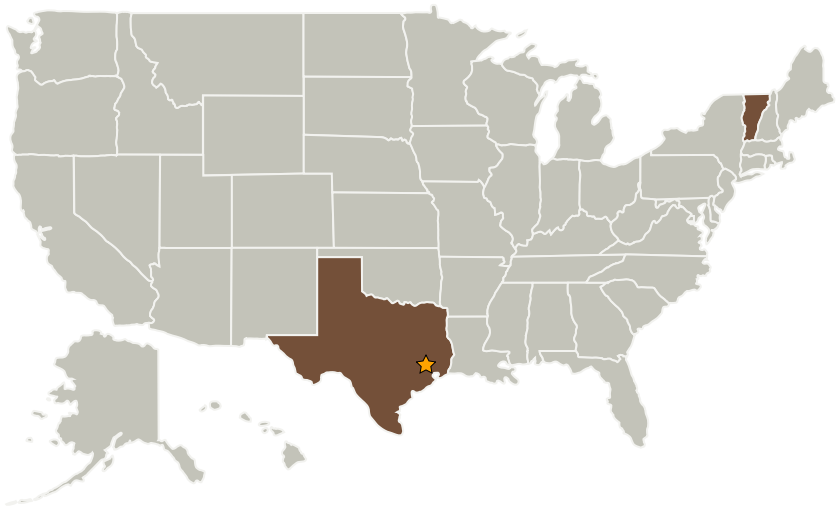
Nanomechanical Water Purification Device, Phase II

Completed Technology Project (2004 - 2006)

Project Introduction

Seldon Laboratories, LLC, proposes a lightweight, low-pressure water purification device that harnesses the unique properties of carbon nanotubes and will operate for an extended period of time to remove microorganisms from large quantities of water. Seldon's proprietary production process results in a membrane composed largely of carbon nanotubes fused to one another. This project will build on the successful results of the Phase I testing to treat higher volumes of water by creating larger membranes and housings suitable for use in spacecraft. The very low pressure requirements will significantly reduce energy and other input requirements. The device will be sufficiently versatile so as to be incorporated into existing systems or used as a standalone system for water treatment.

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
★Johnson Space Center(JSC)	Lead Organization	NASA Center	Houston, Texas
Seldon Technologies, Inc.	Supporting Organization	Industry	Windsor, Vermont

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Table of Contents

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Johnson Space Center (JSC)

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

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Primary U.S. Work Locations	
Texas	Vermont

Project Management

Program Director:

Jason L Kessler

Program Manager:

Carlos Torrez

Technology Areas

Primary:

- TX07 Exploration Destination Systems
  - TX07.1 In-Situ Resource Utilization
    - TX07.1.3 Resource Processing for Production of Mission Consumables